

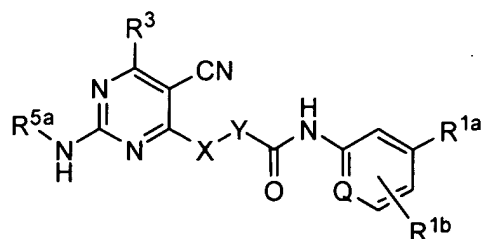
## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the Application.

### LISTING OF CLAIM

1-12 (cancelled).

13. (currently amended) ~~The A compound according to claim 12, of Formula III,~~



III

~~wherein, R³, R⁵, X, Y, and Q are as defined above;~~  
or a pharmaceutically acceptable salt thereof, wherein:

R¹ᵃ is selected from halogen, lower perfluoroalkyl, -NO₂, -OR⁵, and optionally substituted C₁-₄alkyl; and R¹ᵇ is selected from halogen, -OR⁵, -N(R⁵)R⁵, -SR⁵, perfluoroalkyl, and optionally substituted lower alkyl;

R³ is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -OR⁵, -N(R⁵)OR⁵, -ON(R⁵)R⁵, -N(R⁵)N(R⁵)R⁵, -N(R⁵)R⁵, -S(O)₀-₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, -C(O)N(R⁵)R⁵, -N(R⁵)SO₂R⁵, -N(R⁵)C(O)R⁵, -N(R⁵)CO₂R⁵, -C(O)R⁵, -C(=NR⁷)N(R⁵)R⁵, -C(=NR⁷)R⁵, -C(=NR⁷)OR⁵, -N(R⁵)C(=NR⁷)N(R⁵)R⁵, optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl;

R⁵ᵃ is H;

each  $R^5$  is independently selected from -H, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted lower arylalkyl, optionally substituted heterocyclyl, and optionally substituted lower heterocyclalkyl; or

two of  $R^5$ , together with the atom or respective atoms to which they are attached, can combine to form an optionally substituted three- to seven-membered heterocyclic;

each  $R^6$  is independently selected from -H, halogen, trihalomethyl, -CN, -NO<sub>2</sub>, -NH<sub>2</sub>, -OR<sup>5</sup>, -N(R<sup>5</sup>)R<sup>5</sup>, -S(O)<sub>0-2</sub>R<sup>5</sup>, -SO<sub>2</sub>N(R<sup>5</sup>)R<sup>5</sup>, -CO<sub>2</sub>R<sup>5</sup>, -C(O)N(R<sup>5</sup>)R<sup>5</sup>, -N(R<sup>5</sup>)SO<sub>2</sub>R<sup>5</sup>, -N(R<sup>5</sup>)C(O)R<sup>5</sup>, -N(R<sup>5</sup>)CO<sub>2</sub>R<sup>5</sup>, -C(O)R<sup>5</sup>, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclalkyl, and optionally substituted arylalkyl; or

two of  $R^6$ , together with the atom or atoms to which they are attached, can combine to form one of an optionally substituted three to seven-membered alicyclic, and an optionally substituted three to seven-membered heteroalicylic;

each  $R^7$  is independently selected from -H, -CN, -NO<sub>2</sub>, -N(R<sup>5</sup>)R<sup>5</sup>, -OR<sup>5</sup>, -S(O)<sub>0-2</sub>R<sup>5</sup>, -SO<sub>2</sub>N(R<sup>5</sup>)R<sup>5</sup>, -CO<sub>2</sub>R<sup>5</sup>, optionally substituted lower alkyl, optionally substituted lower alkenyl, and optionally substituted lower alkynyl; or

$R^5$  and  $R^7$ , together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;

each of X and Y is independently selected from -C(=O)-, -C(R<sup>6</sup>)R<sup>6</sup>-, -O-, -N(R<sup>5</sup>)-, -C(=NR<sup>7</sup>)-, and -S(O)<sub>0-2</sub>-; provided when X is -O- or -N(R<sup>5</sup>)-, then Y cannot contain phenyl, naphthyl, cyclohexyl, dihydronaphthyl tetrahydronaphthyl, or a five- to six-membered heteroaryl, each optionally substituted; and

Q is either =N- or =C(H)-.

14. (currently amended) The compound according to claim 13, wherein  $R^{1a}$  is selected from -NO<sub>2</sub>, halogen, perfluoroalkyl, haloalkyl, and optionally substituted C<sub>1-2</sub>alkyl, ~~and optionally substituted O-C<sub>1-2</sub>alkyl.~~

15. (original) The compound according to claim 14, wherein  $R^3$  is selected from optionally substituted  $-O-C_{1-4}alkyl$ ,  $-O-C_{1-4}perfluoroalkyl$ , optionally substituted  $-N(H)C_{1-4}alkyl$ , optionally substituted  $-N(C_{1-4}alkyl)C_{1-4}alkyl$ , optionally substituted  $-S(O)_{0-2}-C_{1-4}alkyl$ , and optionally substituted  $-S(O)_{0-2}-C_{1-4}perfluoroalkyl$ .

16. (original) The compound according to claim 15, wherein Y is either  $-N(H)-$  or  $-C(R^6)R^6-$ .

17. (original) The compound according to claim 16, wherein X is selected from  $-O-$ ,  $-N(R^5)-$  and  $-S-$ .

18. (original) The compound according to claim 17, wherein Y is  $-C(R^6)R^6-$ ; wherein each  $R^6$  is independently selected from  $-H$ , halogen, trihalomethyl,  $-NH_2$ , optionally substituted  $-O-C_{1-4}alkyl$ , optionally substituted  $-N(H)C_{1-4}alkyl$ , optionally substituted  $-S-C_{1-4}alkyl$ , optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.

19. (original) The compound according to claim 18, wherein Y is  $-C(H)R^6-$ ; wherein  $R^6$  is independently selected from  $-H$ , halogen, trihalomethyl,  $-NH_2$ , optionally substituted  $-O-C_{1-4}alkyl$ , optionally substituted  $-N(H)C_{1-4}alkyl$ , optionally substituted  $-S-C_{1-4}alkyl$ , optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.

20. (original) The compound according to claim 19, wherein Q is  $=C(H)-$ .

21-28. (cancelled)

29. (currently amended) The compound according to claim ~~28~~, 13, wherein  $R^{1a}$  is selected from halo, lower perfluoroalkyl,  $-NO_2$ , ~~optionally substituted  $-O-C_{1-4}alkyl$~~ , and optionally substituted  $C_{1-4}alkyl$ .

30-33. (Cancelled)

34. (currently amended) ~~The A compound according to claim 1~~, selected from Table 3.

**Table 3**

Entry	Name	Structure
1	2-[(3-cyano-4,6-dimethyl-5-nitropyridin-2-yl)oxy]-N-[3-(trifluoromethyl)phenyl]acetamide	
5	N <sup>2</sup> -[2-amino-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
7	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-(methoxy)phenyl]acetamide	
9	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-(4-chlorophenyl)acetamide	
11	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-(3-chlorophenyl)acetamide	
14	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]oxy}-N-[3-(trifluoromethyl)phenyl]acetamide	

**Table 3**

Entry	Name	Structure
16	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-methyl-N-[3-(trifluoromethyl)phenyl]acetamide	
17	N <sup>2</sup> -[4-amino-6-(methylthio)-1,3,5-triazin-2-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
20	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
30	2-amino-4-({2-[2,5-bis(methoxy)phenyl]-2-oxoethyl}thio)-6-(methylthio)pyrimidine-5-carbonitrile	
31	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[4-fluoro-3-(trifluoromethyl)phenyl]acetamide	
34	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[4-chloro-3-(trifluoromethyl)phenyl]acetamide	

Table 3

Entry	Name	Structure
35	2-amino-4-(methylthio)-6-({2-oxo-1-[3-(trifluoromethyl)phenyl]pyrrolidin-3-yl}thio)pyrimidine-5-carbonitrile	
36	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[6-(trifluoromethyl)pyridin-2-yl]acetamide	
37	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[4-(trifluoromethyl)pyridin-2-yl]acetamide	
41	2-{[2-(acetylamino)-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-(trifluoromethyl)phenyl]acetamide	
42	(2S)-2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]oxy}-N-[3-(trifluoromethyl)phenyl]propanamide	
45	2-{[2-amino-5-formyl-6-(methylamino)pyrimidin-4-yl]thio}-N-[3-(trifluoromethyl)phenyl]acetamide	

**Table 3**

Entry	Name	Structure
46	2-{{2-amino-5-formyl-6-(methylthio)pyrimidin-4-yl}oxy}-N-[3-(trifluoromethyl)phenyl]acetamide	
47	2-{{4-amino-6-(methylthio)-1,3,5-triazin-2-yl}oxy}-N-[3-(trifluoromethyl)phenyl]acetamide	
54	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[2-(methyloxy)-5-(trifluoromethyl)phenyl]acetamide	
55	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[2-chloro-5-(trifluoromethyl)phenyl]acetamide	
58	N <sup>2</sup> -[2-amino-5-[(E)-hydrazonomethyl]-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	

**Table 3**

Entry	Name	Structure
59	N <sup>2</sup> -[2-amino-5-[(E)-(hydroxyimino)methyl]-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
60	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
61	2-{[2-amino-5-cyano-6-(methylamino)pyrimidin-4-yl]thio}-N-[3-(trifluoromethyl)phenyl]acetamide	
62	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[2-amino-5-(trifluoromethyl)phenyl]acetamide	
63	2-amino-4-(methylthio)-6-({[6-(trifluoromethyl)-1H-benzimidazol-2-yl]methyl}thio)pyrimidine-5-carbonitrile	
64	2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	



**Table 3**

Entry	Name	Structure
65	N <sup>2</sup> -[5-cyano-2-(methylamino)-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
66	2-{{2-amino-5-cyano-6-(dimethylamino)pyrimidin-4-yl}thio}-N-[3-(trifluoromethyl)phenyl]acetamide	
67	(S)-1-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]prolinamide	
68	(2R)-2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}oxy}-N-[3-(trifluoromethyl)phenyl]propanamide	
69	1-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}oxy}-N-[3-(trifluoromethyl)phenyl]cyclopropane carboxamide	
70	(2S)-2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}oxy}-3-methyl-N-[3-(trifluoromethyl)phenyl]butanamide	

**Table 3**

Entry	Name	Structure
72	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]glycinamide	
73	1-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]amino}-N-[3-(trifluoromethyl)phenyl]cyclopropane carboxamide	
74	N <sup>2</sup> -[2-amino-5-cyano-6-(methylsulfinyl)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
75	N <sup>2</sup> -[2-amino-5-cyano-6-(methylsulfonyl)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
76	N <sup>2</sup> -(5-cyano-2-morpholin-4-ylpyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]glycinamide	
78	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	

Table 3

Entry	Name	Structure
79	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[2-(methyloxy)-5-(trifluoromethyl)phenyl]-L-alaninamide	
80	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[2-chloro-5-(trifluoromethyl)phenyl]-L-alaninamide	
83	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-D-alaninamide	
84	2-[(2-amino-5-cyano-6-morpholin-4-yl)pyrimidin-4-ylthio]-N-[3-(trifluoromethyl)phenyl]acetamide	
85	(R)-1-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]prolinamide	
86	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

**Table 3**

Entry	Name	Structure
87	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-[2-(dimethylamino)ethyl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
88	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
89	N <sup>2</sup> -(2,6-diamino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
90	N <sup>2</sup> -(2-amino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
91	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
93	2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-1,2-dimethyl-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	

**Table 3**

Entry	Name	Structure
94	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-amino-5-(trifluoromethyl)phenyl]-L-alaninamide	
95	ethyl [1-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-2-({[3-(trifluoromethyl)phenyl]amino}carbonyl)hydrazino]acetate	
96	2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-2-methyl-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	
100	N <sup>2</sup> -[5-cyano-2-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
101	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-(tetrahydro-2H-pyran-4-ylmethyl)-N-[3-(trifluoromethyl)phenyl]glycinamide	

**Table 3**

Entry	Name	Structure
102	N <sup>2</sup> -(2-amino-5-cyano-6-([2-(dimethylamino)ethyl]oxy)pyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
103	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-6-([(1,1-dimethylethyl)oxy]carbonyl)-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	
104	2-amino-4-(methylthio)-6-(methyl((1S)-1-[6-(trifluoromethyl)-1H-benzimidazol-2-yl]ethyl)amino)pyrimidine-5-carbonitrile	
105	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-[2-(tetrahydro-2H-pyran-4-yl)ethyl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
106	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-([2-(diethylamino)ethyl]amino)-5-(trifluoromethyl)phenyl]-L-alaninamide	

**Table 3**

Entry	Name	Structure
107	2-amino-4-(methylthio)-6-(((1S)-1-[6-(trifluoromethyl)-1H-benzimidazol-2-yl]ethyl)amino)pyrimidine-5-carbonitrile	
108	2-{2-amino-5-cyano-6-[1-(3-trifluoromethyl-phenyl)carbamoyl]-1S-ethylamino]-pyrimidin-4-ylamino}-N-(3-trifluoromethyl-phenyl)-2S-propionamide	
109	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-(3-methylphenyl)glycinamide	
110	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-[3-(1-methylethyl)phenyl]glycinamide	
111	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-5-[imino(nitroamino)methyl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

**Table 3**

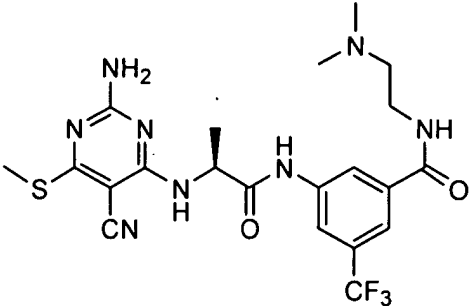
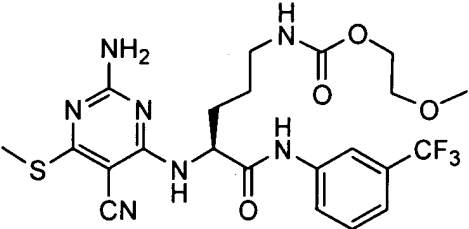
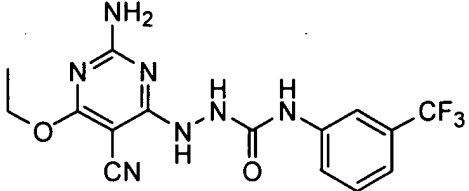
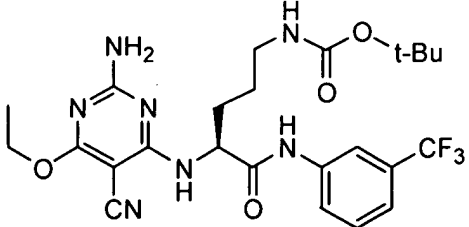
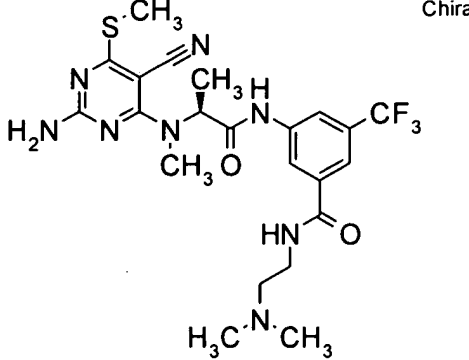
Entry	Name	Structure
112	methyl 3-((N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl)amino)-5-(trifluoromethyl)benzoate	
113	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-(3-nitrophenyl)-L-alaninamide	
114	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-lysινamide	
115	N <sup>2</sup> -[2-amino-5-cyano-6-(propyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
117	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-argininamide	
118	N <sup>2</sup> -[2-amino-5-cyano-6-(methylsulfinyl)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	



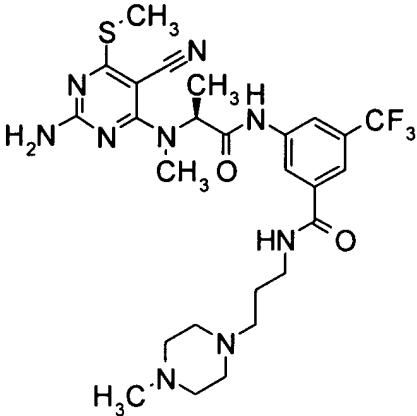
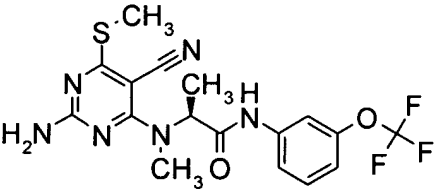
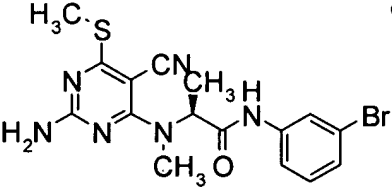
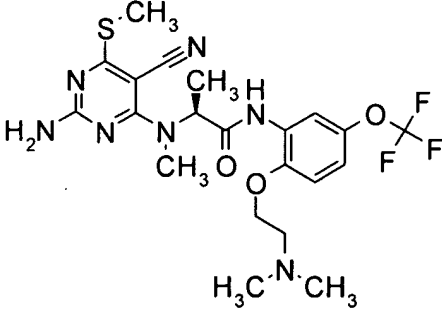
Table 3

Entry	Name	Structure
119	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
120	N <sup>2</sup> -[2-amino-5-cyano-6-(propyloxy)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
121	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
122	N <sup>2</sup> -[2-amino-5-cyano-6-[(1-methylethyl)oxy]pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
123	N-5-acetyl-N-2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
124	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-(3-aminophenyl)-L-alaninamide	

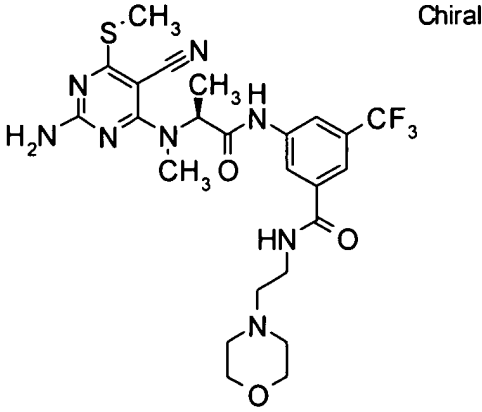
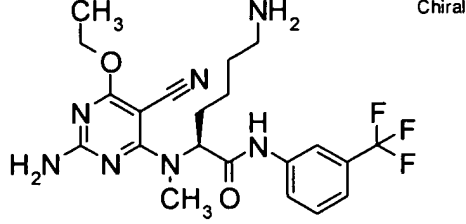
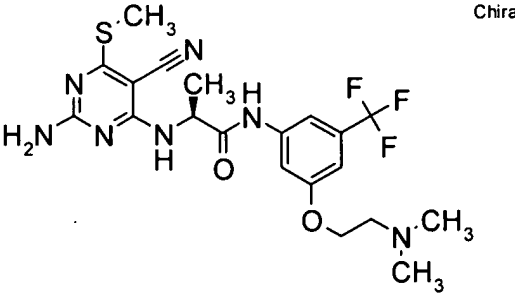
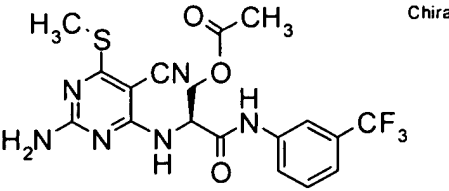
**Table 3**

Entry	Name	Structure
125	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl}amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	
126	2-(methoxy)ethyl ((4S)-4-([2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]amino)-5-oxo-5-([3-(trifluoromethyl)phenyl]amino)pentyl)carbamate	
127	2-[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	
128	1,1-dimethylethyl ((4S)-4-([2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]amino)-5-oxo-5-([3-(trifluoromethyl)phenyl]amino)pentyl)carbamate	
130	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-methyl-L-alanyl}amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	

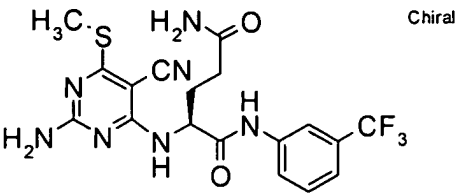
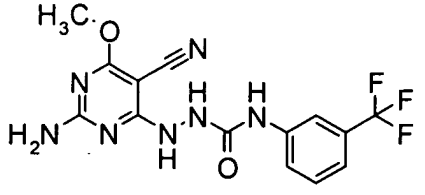
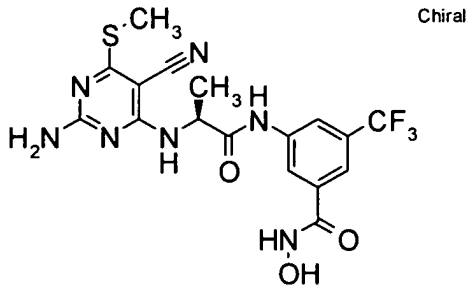
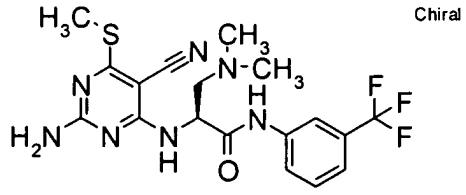
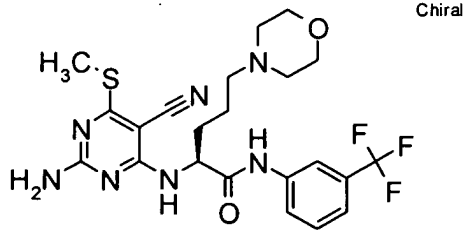
**Table 3**

Entry	Name	Structure
131	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-methyl-L-alanyl}amino)-N-[3-(4-methylpiperazin-1-yl)propyl]-5-(trifluoromethyl)benzamide	 <p>Chiral</p>
132	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N~2~-methyl-N-{3-[(trifluoromethyl)oxy]phenyl}-L-alaninamide	 <p>Chiral</p>
133	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-(3-bromophenyl)-N~2~-methyl-L-alaninamide	 <p>Chiral</p>
134	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-{2-[(2-(dimethylamino)ethyl)oxy]-5-[(trifluoromethyl)oxy]phenyl}-N~2~-methyl-L-alaninamide	 <p>Chiral</p>

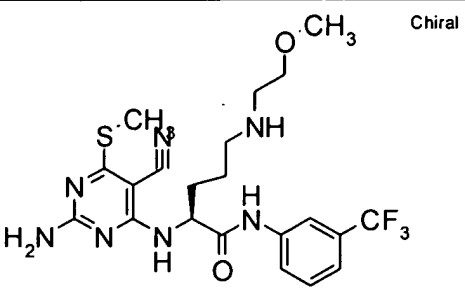
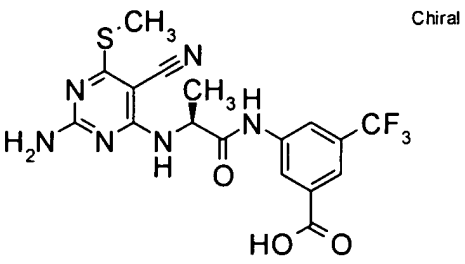
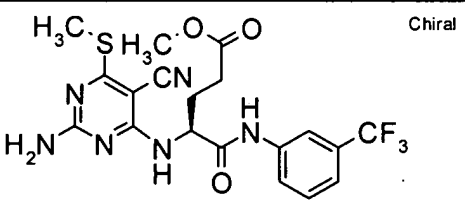
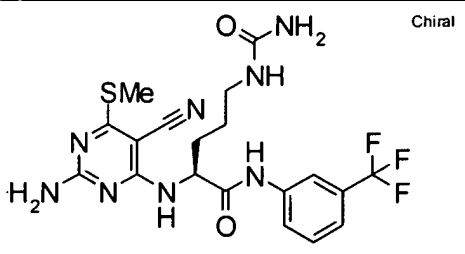
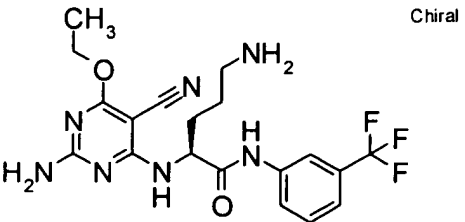
**Table 3**

Entry	Name	Structure
135	3-((N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-methyl-L-alanyl)amino)-N-(2-morpholin-4-ylethyl)-5-(trifluoromethyl)benzamide	
136	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N~2~-methyl-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	
137	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-{{2-(dimethylamino)ethyl}oxy}-5-(trifluoromethyl)phenyl]-L-alanineamide	
138	(2S)-2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}amino}-3-oxo-3-{{3-(trifluoromethyl)phenyl}amino}propyl acetate	

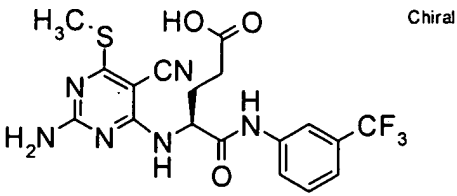
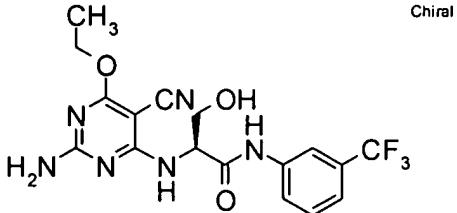
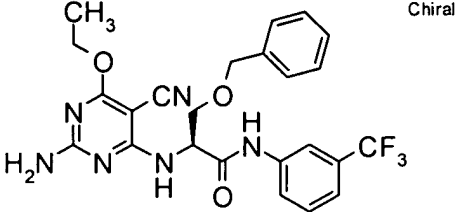
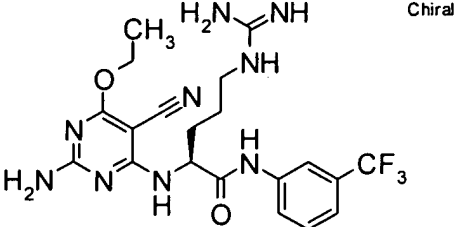
**Table 3**

Entry	Name	Structure
139	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-1-~-[3-(trifluoromethyl)phenyl]-L-glutamamide	
140	2-[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	
141	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl}amino)-N-hydroxy-5-(trifluoromethyl)benzamide	
142	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-3-(dimethylamino)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
143	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-5-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-norvalinamide	

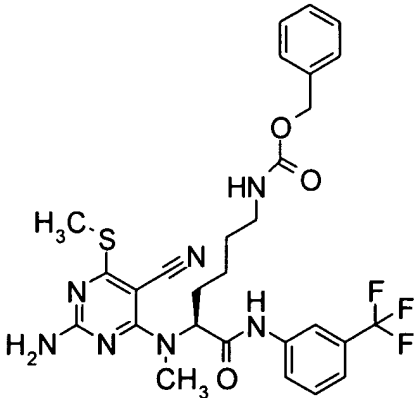
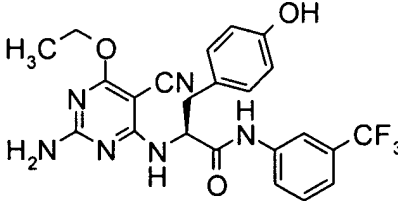
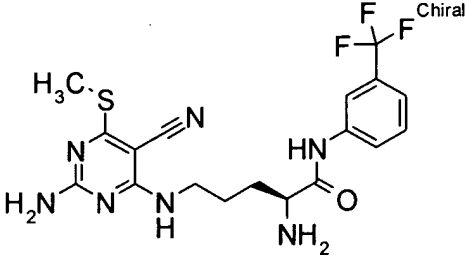
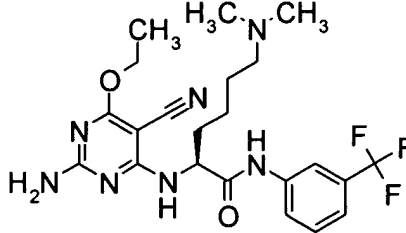
**Table 3**

Entry	Name	Structure
144	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N <sup>5</sup> ~-[2-(methyloxy)ethyl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
145	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl}amino)-5-(trifluoromethyl)benzoic acid	
146	methyl N <sup>2</sup> ~-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	
147	N <sup>5</sup> -(aminocarbonyl)-N <sup>2</sup> ~-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
148	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

**Table 3**

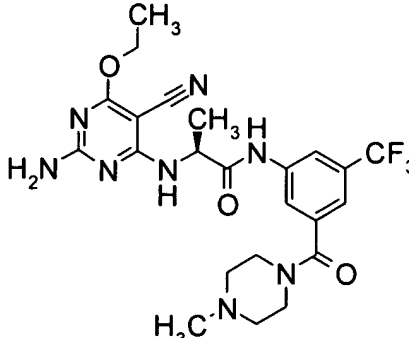
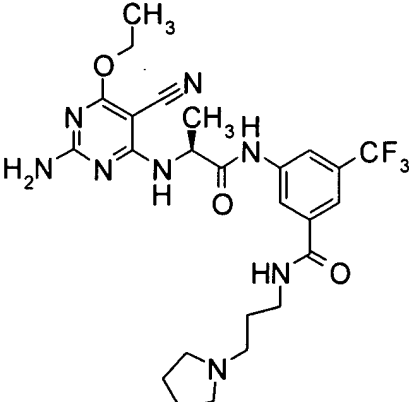
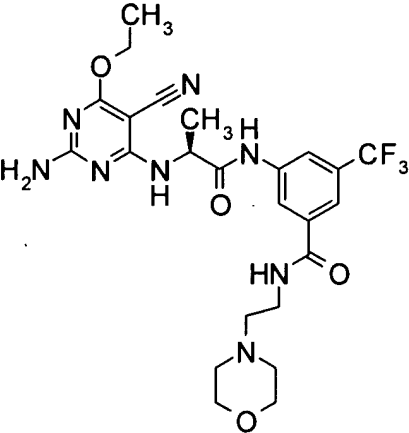
Entry	Name	Structure
149	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamine	
150	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-serinamide	
151	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-O-(phenylmethyl)-N-[3-(trifluoromethyl)phenyl]-L-serinamide	
152	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-argininamide	

**Table 3**

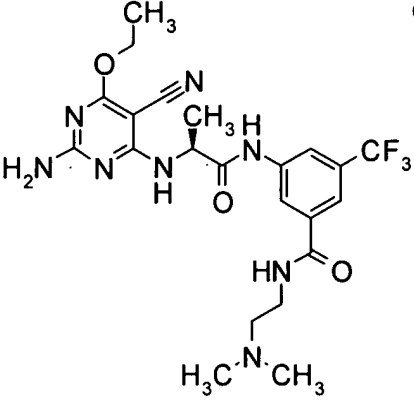
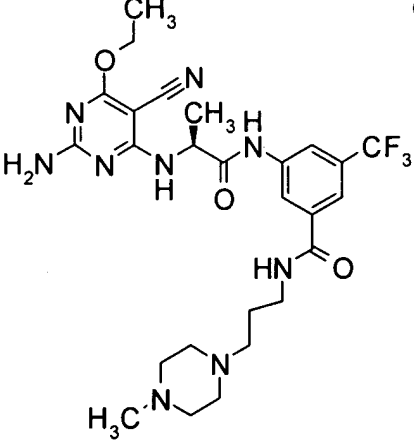
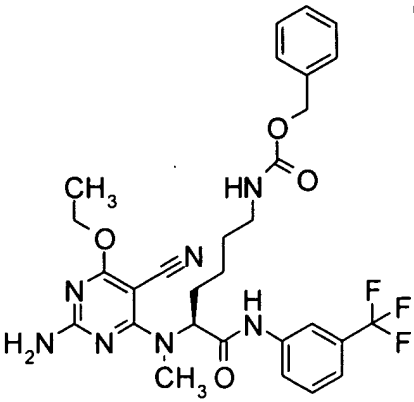
Entry	Name	Structure
153	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N <sup>2</sup> -methyl-N <sup>6</sup> -[[(phenylmethyl)oxy]carbonyl]-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	
154	N-α-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-tyrosineamide	
155	N <sup>5</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithineamide	
156	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N <sup>6</sup> ,N <sup>6</sup> -dimethyl-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	



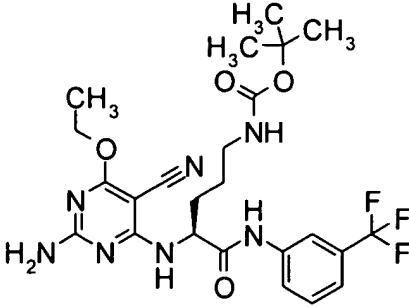
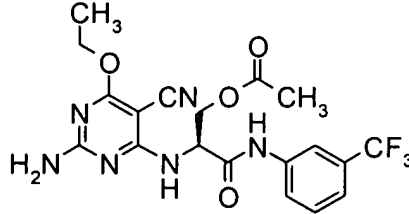
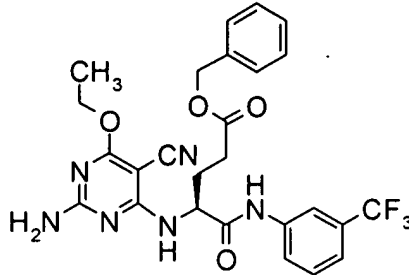
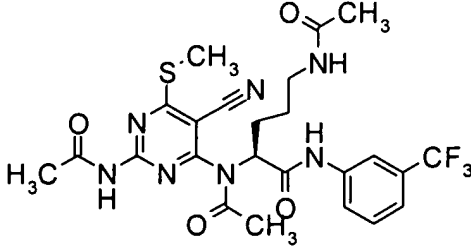
**Table 3**

Entry	Name	Structure
157	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-[(4-methylpiperazin-1-yl)carbonyl]-5-(trifluoromethyl)phenyl]-L-alaninamide	 <p>Chiral</p>
158	3-({N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)-N-(3-pyrrolidin-1-ylpropyl)-5-(trifluoromethyl)benzamide	 <p>Chiral</p>
159	3-({N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)-N-(2-morpholin-4-ylethyl)-5-(trifluoromethyl)benzamide	 <p>Chiral</p>

**Table 3**

Entry	Name	Structure
160	3-((N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl)amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	 <p>Chiral</p>
161	3-((N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl)amino)-N-[3-(4-methylpiperazin-1-yl)propyl]-5-(trifluoromethyl)benzamide	 <p>Chiral</p>
162	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N <sup>2</sup> -methyl-N <sup>6</sup> -{[(phenylmethyl)oxy]carbonyl}-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	 <p>Chiral</p>

**Table 3**

Entry	Name	Structure
163	1,1-dimethylethyl ((4S)-4-([2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino)-5-oxo-5-([3-(trifluoromethyl)phenyl]amino)pentyl)carbamate	
164	(2S)-2-([2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino)-3-oxo-3-([3-(trifluoromethyl)phenyl]amino)propyl acetate	
165	phenylmethyl N~2~-([2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	
166	N <sup>2</sup> , N <sup>5</sup> -diacetyl-N~2~-([2-(acetylamino)-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

**Table 3**

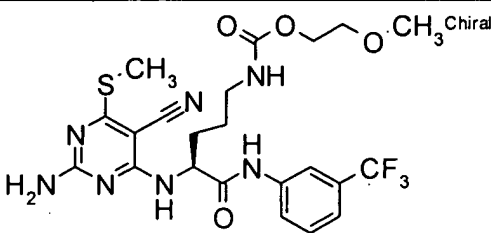
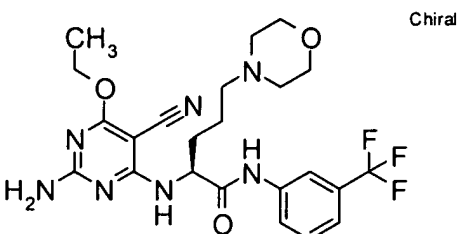
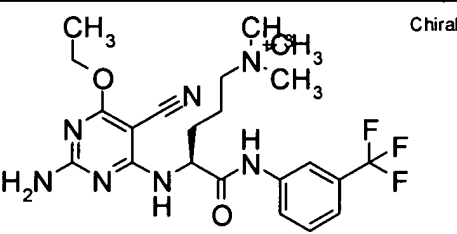
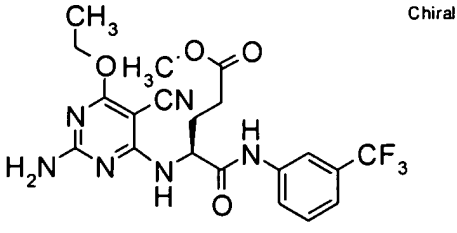
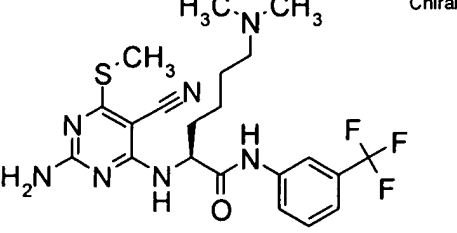
Entry	Name	Structure
167	2-(methoxy)ethyl ((4S)-4-[[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]amino]-5-oxo-5-[[3-(trifluoromethyl)phenyl]amino]pentyl)carbamate	
168	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-5-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-norvalinamide	
169	N-((4S)-4-[[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]amino]-5-oxo-5-[[3-(trifluoromethyl)phenyl]amino]pentyl)-N,N-dimethylmethanaminium	
170	Methyl N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	
171	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N <sup>6</sup> ,N <sup>6</sup> -dimethyl-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	

Table 3

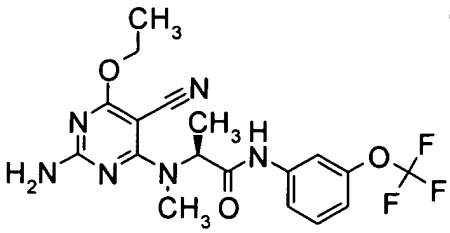
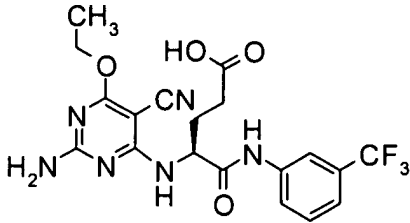
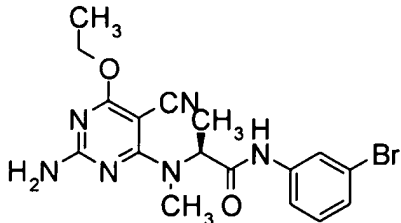
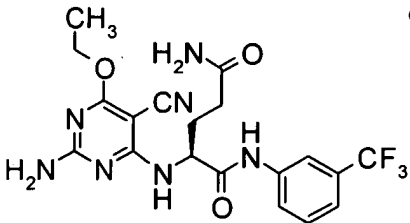
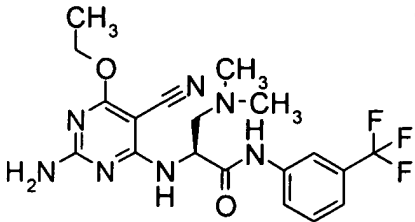
Entry	Name	Structure
172	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N~2~-methyl-N-{3-[(trifluoromethyl)oxy]phenyl}-L-alaninamide	
173	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamine	
174	N~2~-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-(3-bromophenyl)-N~2~-methyl-L-alaninamide	
175	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N <sup>1</sup> -[3-(trifluoromethyl)phenyl]-L-glutamamide	
176	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-3-(dimethylamino)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	

Table 3

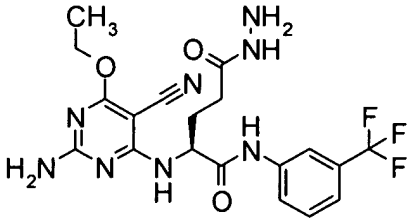
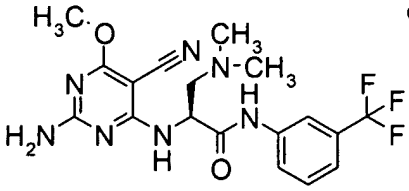
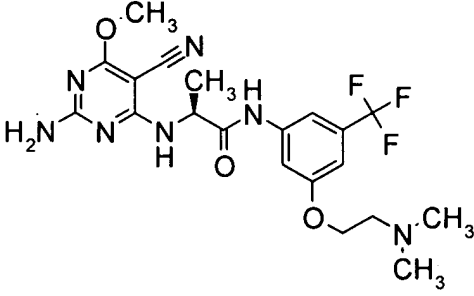
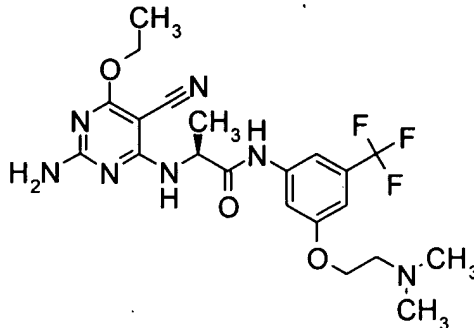
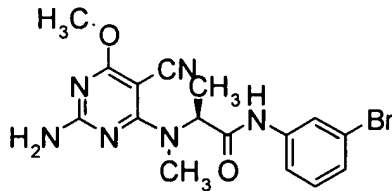
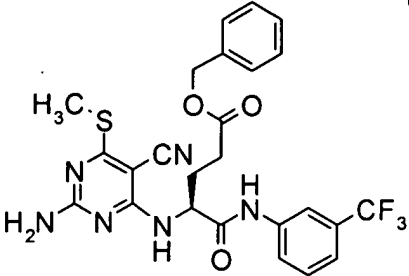
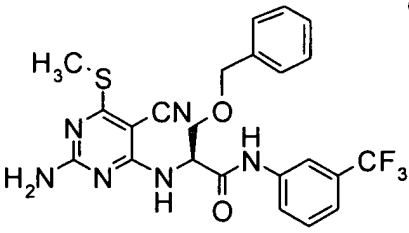
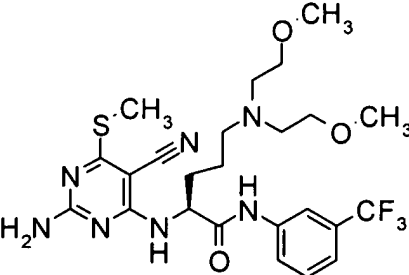
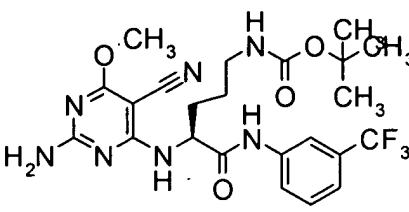
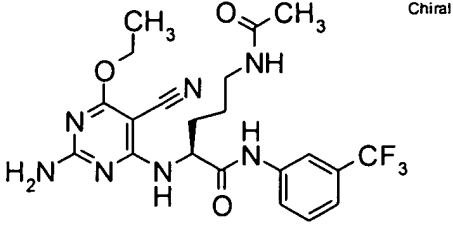
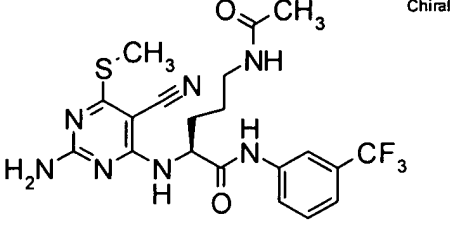
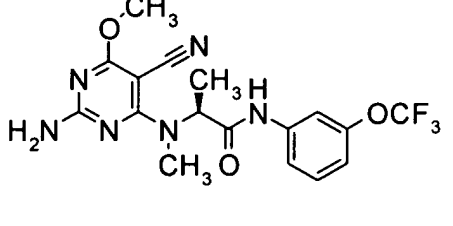
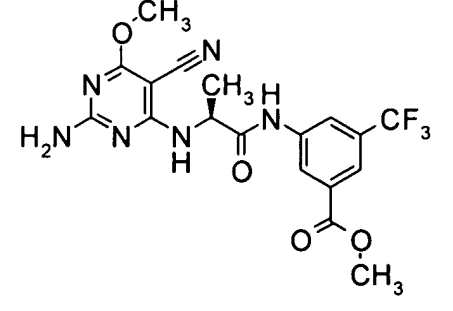
Entry	Name	Structure
177	2-(2-amino-5-cyano-6-ethoxypyrimidin-4-ylamino)-5-hydrazinyl-5-oxo-N-(3-(trifluoromethyl)phenyl)pentanamide	
178	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-3-(dimethylamino)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
179	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-N-[3-([2-(dimethylamino)ethyl]oxy)-5-(trifluoromethyl)phenyl]-L-alaninamide	
180	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-([2-(dimethylamino)ethyl]oxy)-5-(trifluoromethyl)phenyl]-L-alaninamide	
181	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-N-(3-bromophenyl)-N <sup>2</sup> -methyl-L-alaninamide	

Table 3

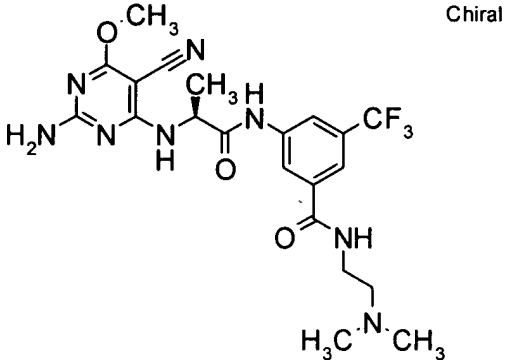
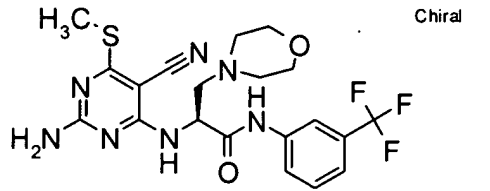
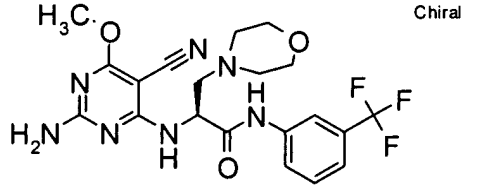
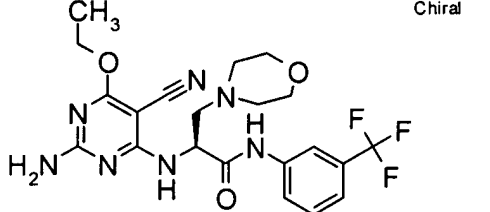
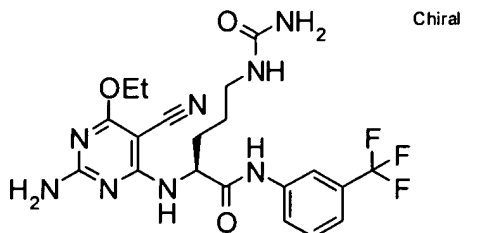
Entry	Name	Structure
182	phenylmethyl N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	 <p>Chiral</p>
183	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-O-(phenylmethyl)-N-[3-(trifluoromethyl)phenyl]-L-serinamide	 <p>Chiral</p>
184	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N~5~,N~5~-bis[2-(methoxy)ethyl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	 <p>Chiral</p>
185	1,1-dimethylethyl ((4S)-4-([2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]amino)-5-oxo-5-[[3-(trifluoromethyl)phenyl]amino]pentyl)carbamate	 <p>Chiral</p>

**Table 3**

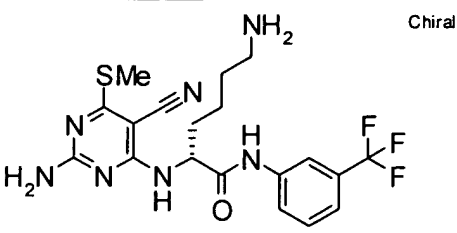
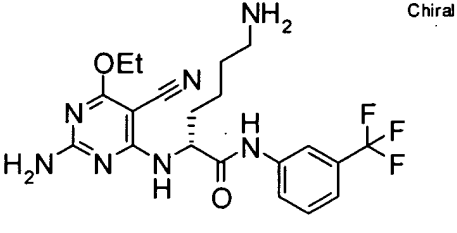
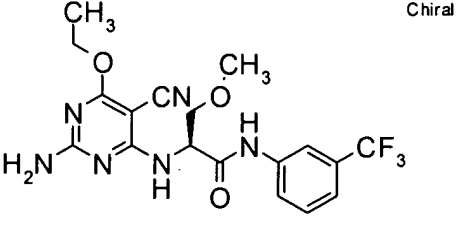
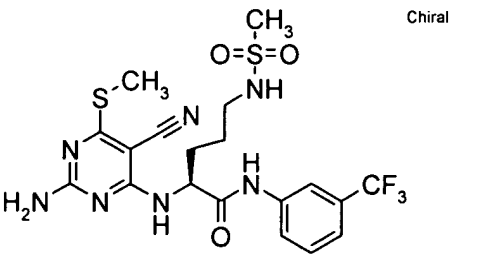
Entry	Name	Structure
186	N <sup>5</sup> -acetyl- N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
187	N <sup>5</sup> -acetyl- N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
188	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]- N <sup>2</sup> -methyl-N-{3-[(trifluoromethyl)oxy]phenyl}-L-alaninamide	
189	methyl 3-({N-[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-L-alanyl}amino)-5-(trifluoromethyl)benzoate	



**Table 3**

Entry	Name	Structure
190	3-((N-[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-L-alanyl)amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	
191	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-3-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
192	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-3-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
193	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-3-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
194	N <sup>5</sup> -(aminocarbonyl)-N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

**Table 3**

Entry	Name	Structure
195	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-D-lysineamide	
196	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-D-lysineamide	
197	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-O-methyl-N-[3-(trifluoromethyl)phenyl]-L-serineamide	
198	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N <sup>5</sup> -(methylsulfonyl)-N-[3-(trifluoromethyl)phenyl]-L-ornithineamide	

35. (currently amended) A pharmaceutical composition comprising the compound according to claims 13 and a pharmaceutically acceptable carrier.

36. (currently amended) A metabolite of the compound or the pharmaceutical composition according to claims 13.

37. (currently amended) A method of modulating *in vivo* activity of a kinase, the method comprising administering to a subject an effective amount of a composition comprising a compound according to claim 13 ~~and/or a compound explicitly provided against in claim 1.~~

38. (original) The method according to claim 37, wherein the kinase is p70S6K.

39. (original) The method according to claim 38, wherein modulating the *in vivo* activity of p70S6K comprises inhibition of p70S6K.

40. (currently amended) A method of treating diseases or disorders associated with uncontrolled, abnormal, and/or unwanted cellular activities, the method comprising administering, to a mammal in need thereof, a therapeutically effective amount of a composition comprising a compound according to claim 13 ~~and/or a compound explicitly provided against in claim 1.~~

41. (currently amended) A method of screening for modulator of a p70S6 kinase, the method comprising combining either a compound according to claim 13 ~~and/or a compound explicitly provided against in claim 13,~~ and at least one candidate agent and determining the effect of the candidate agent on the activity of said kinase.

42. (currently amended) A method of inhibiting proliferative activity in a cell, the method comprising administering an effective amount of: the compound according to claims 13 ~~and/or a compound explicitly provided against in claim 1.~~

43. (currently amended) A method of inhibiting abnormal metabolic activity in a cell, the method comprising administering an effective amount of: the compound according to any of claims 13 ~~and/or a compound explicitly provided against in claim 1.~~